



Governor

*Lori F. Kaplan*  
Commissioner

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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## **FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) AND NEW SOURCE REVIEW OFFICE OF AIR QUALITY and the ANDERSON OFFICE OF AIR MANAGEMENT**

**iPower Technologies, LLC  
4640 Pendelton Avenue  
Anderson, Indiana 46013**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F095-16578-00118	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:May 15, 2003  Expiration Date:May 15, 2008

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Anderson Office of Air Management. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary source for the manufacturing of portable electric generators.

Authorized individual:	President
Source Address:	4640 Pendelton Avenue, Anderson, Indiana 46013
Mailing Address:	4640 Pendelton Avenue, Anderson, Indiana 46013
General Source Phone:	(765) 778-5909
SIC Code:	3621
Source Location Status:	Madison
	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor Source, under PSD Rules;
	Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) natural gas fired engine built test stands identified as E17 and E18, each with an output rating of 670 HP, and each exhausting through stacks E17 and E18, respectively.
- (b) One (1) natural gas fired engine built test stand identified as E19, with an output rating of 1600 HP, and exhausting through stack E19.

### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

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This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:  
Ten (10) natural gas-fired space heaters, identified as 1 through 10 with a total heat input capacity of 1.75 million British Thermal Units per hour (MMBtu/hr).
- (b) Other categories with emissions below insignificant thresholds (i.e. less than 5 pounds per hour NO<sub>x</sub>, less than 25 pounds per day CO and less than 3 pound per hour VOC).
  - (1) Three (3) natural gas fired engine test stands identified as E1, E2 and E3, each with an output rating of 235 HP, and each exhausting through stacks E1, E2 and E3, respectively.
  - (2) Thirteen (13) natural gas fired engine endurance test stands identified as E4 through E16, each with an output rating of 235 HP, and each exhausting through stacks E4 through E16, respectively.

- (3) One (1) epoxy dip tank, identified as PDG-U500, which is capable of coating stator coils at a maximum rate of 300 units per hour.
- (c) One electric drying oven, at a rated capacity of 108 kW.
- (d) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (f) Closed loop heating and cooling systems.
- (g) Infrared cure equipment.
- (h) Paved and unpaved roads and parking lots with public access.
- (i) Stationary fire pumps.

**A.4 FESOP Applicability [326 IAC 2-8-2]**

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This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

**A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

## **SECTION B                    GENERAL CONDITIONS**

### **B.1        Permit No Defense [IC 13]**

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Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

### **B.2        Definitions [326 IAC 2-8-1]**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

### **B.3        Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]**

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This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### **B.4        Enforceability [326 IAC 2-8-6]**

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- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and the Anderson Office of Air Management, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the Anderson Office of Air Management.

### **B.5        Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]**

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

### **B.6        Severability [326 IAC 2-8-4(4)]**

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.7        Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

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This permit does not convey any property rights of any sort, or any exclusive privilege.

### **B.8        Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]**

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- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management

P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, and the Anderson Office of Air Management within a reasonable time, any information that IDEM, OAQ, and the Anderson Office of Air Management may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, and the Anderson Office of Air Management copies of records required to be kept by this permit.
- (c) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

**B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]**

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IDEM, OAQ and the Anderson Office of Air Management may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

**B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]**

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- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

**B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]**

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

**B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the Anderson Office of Air Management on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, and the Anderson Office of Air Management may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance



of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and the Anderson Office of Air Management upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and the Anderson Office of Air Management. IDEM, OAQ, and the Anderson Office of Air Management may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the Anderson Office of Air Management makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the Anderson Office of Air Management within a reasonable time.

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**B.14 Emergency Provisions [326 IAC 2-8-12]**

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and the Anderson Office of Air Management, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)  
or,  
Telephone No.: 317-233-5674 (ask for Compliance Section)  
Facsimile No.: 317-233-5967

Anderson Office of Air Management  
Telephone No.: 317-646-9835  
Facsimile No.: 317-646-9657

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ and the Anderson Office of Air Management, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ and the Anderson Office of Air Management, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]**

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or the Anderson Office of Air Management determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ or the Anderson Office of Air Management, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ or the Anderson Office of Air Management, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or the Anderson Office of Air Management, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.17 Permit Renewal [326 IAC 2-8-3(h)]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and the Anderson Office of Air Management and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the

application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the Anderson Office of Air Management on or before the date it is due.

(2) If IDEM, OAQ and the Anderson Office of Air Management upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ and the Anderson Office of Air Management takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and the Anderson Office of Air Management, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

**B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]**

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- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and the Anderson Office of Air Management, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) **Emission Trades** [326 IAC 2-8-15(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) **Alternative Operating Scenarios** [326 IAC 2-8-15(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

**B.20 Permit Revision Requirement** [326 IAC 2-8-11.1]

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A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

**B.21 Inspection and Entry** [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, and the Anderson Office of Air Management, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose

of assuring compliance with this permit or applicable requirements.

**B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

**B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]**

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- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.



## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]**

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The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

**C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]**

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The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

**C.6 Fugitive Dust Emissions [326 IAC 6-4]**

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

**C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]**

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Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and  
Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

### **Testing Requirements [326 IAC 2-8-4(3)]**

#### **C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require

certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and the Anderson Office of Air Management not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and the Anderson Office of Air Management, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

##### **C.10 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

##### **C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]**

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

##### **C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing performed required by Section D of this permit shall be performed

according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

### **Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

#### **C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]**

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If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### **C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

#### **C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

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- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the Anderson Office of Air Management makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the Anderson Office of Air Management within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
Anderson Office of Air Management  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46011
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the Anderson Office of Air Management on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

**Stratospheric Ozone Protection**

**C.17 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with

the required practices pursuant to 40 CFR 82.156

- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) Two (2) natural gas fired engine built test stands identified as E17 and E18, each with an output rating of 670 HP, and each exhausting through stacks E17 and E18, respectively.
- (b) One (1) natural gas fired engine built test stand identified as E19, with an output rating of 1600 HP, and exhausting through stack E19.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 FESOP Limit [326 IAC 2-8]

The input of natural gas fuel to the one (1) Engine built test stand (E19) shall be limited to less than 1.995 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month. This fuel usage limitation is equivalent to emissions of 1.323 tons per year of CO and NOx (based on the same emission factor of 1.5 gr/bhp-hr for each). Any change or modification which may result in the fuel usage from E19 covered in this permit to be equal or greater than the limitation must be approved by the Office of Air Quality (OAQ) before such change may occur.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

### Compliance Determination Requirements

#### D.1.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) Within 180 days after initial start-up of the representative engine test stands, the Permittee shall perform CO and NOx testing on one (1) 670 hp engine built test stand (from E17 and E18), and one (1) 1600 hp engine built test stand (E19) utilizing methods as approved by the commissioner. This test shall be repeated whenever there is a change in the operating conditions of any engine causing potential emissions to increase. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) The results of testing required shall be used to confirm the CO and NOx emission factor (1.5 grams per break horse power) provided by the source. If testing indicates an emission factor greater than 1.5 gr/bhp then fuel usage shall be adjusted to keep potential CO and NOx emissions to less than 100 tons per year.

### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no Compliance Monitoring Requirements applicable to these emission units.

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

**D.1.3 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.1, the Permittee shall maintain monthly and 12 consecutive monthly record of fuel input to the engine built test stand E19.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.4 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).



## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

#### Insignificant Activities

- (b) Other categories with emissions below insignificant thresholds (i.e. less than 5 pounds per hour NO<sub>x</sub>, less than 25 pounds per day CO and less than 3 pound per hour VOC).
  - (1) Three (3) natural gas fired engine test stands identified as E1, E2 and E3, each with an output rating of 235 HP, and each exhausting through stacks E1, E2 and E3, respectively.
  - (2) Thirteen (13) natural gas fired engine endurance test stands identified as E4 through E16, each with an output rating of 235 HP, and each exhausting through stacks E4 through E16, respectively.
  - (3) One (1) epoxy dip tank, identified as PDG-U500, which is capable of coating stator coils at a maximum rate of 300 units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

The Epoxy Dip Tank (PDG-U500) emits an actual VOC emissions of less than 15 pounds per day. Any change or modification which may increase the Epoxy Dip Tank (PDG-U500) actual VOC emissions to greater than fifteen (15) pounds per day, before add on controls, shall require OAQ's prior approval before such change can take place.

### Compliance Determination Requirements

#### D.2.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) Within 180 days after issuance of this permit, the Permittee shall perform CO and NO<sub>x</sub> testing on any three (3) 235 hp engine built test stands (from E1 through E16) utilizing methods as approved by the commissioner. This test shall be repeated whenever there is a change in the operating conditions of any engine causing potential emissions to increase. Testing shall be conducted in accordance with Section C- Performance Testing.

- (b) The results of testing required shall be used to confirm the CO and NOx emission factor (2.07 and 1.68 grams per break horse power, respectively) provided by the source. If testing indicates an emission factor greater than 2.07 gr/bhp for CO and 1.68 gr/bhp for NOx then fuel usage shall be adjusted to keep potential CO and NOx emissions to less than 100 tons per year.

#### **D.2.3 Volatile Organic Compounds (VOC)**

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Compliance with the VOC content and usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, and the Anderson Office of Air Management reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### **D.2.4 VOC Emissions**

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Compliance with Condition D.2.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

#### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

There are no Compliance Monitoring Requirements applicable to these emission units.

#### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### **D.2.5 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1.
  - (1) The VOC content of each coating material and solvent used.
  - (2) The amount of coating material and solvent used less water on daily basis.
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
  - (3) The volume weighted VOC content of the coatings used for each month;
  - (4) The cleanup solvent usage for each month;
  - (5) The total VOC usage for each month; and
  - (6) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**and the ANDERSON OFFICE OF AIR MANAGEMENT**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: iPower Technologies, LLC  
Source Address: 4640 Pendelton Avenue, Anderson, IN 46013  
Mailing Address: 4640 Pendelton Avenue, Anderson, IN 46013  
FESOP No.: 095-16578-00118

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**and the ANDERSON OFFICE OF AIR MANAGEMENT**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: iPower Technologies, LLC  
Source Address: 4640 Pendelton Avenue, Anderson, IN 46013  
Mailing Address: 4640 Pendelton Avenue, Anderson, IN 46013  
FESOP No.: 095-16578-00118

**This form consists of 2 pages**

**Page 1 of 2**

**9** This is an emergency as defined in 326 IAC 2-7-1(12)  
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and the ANDERSON OFFICE OF AIR MANAGEMENT**

**FESOP Quarterly Report**

Source Name: iPower Technologies, LLC  
Source Address: 4640 Pendelton Avenue, Anderson, IN 46013  
Mailing Address: 4640 Pendelton Avenue, Anderson, IN 46013  
FESOP No.: 095-16578-00118  
Facility: One (1) natural gas fired engine built test stand identified as E19  
Parameter: Natural gas fuel usage  
Limit: Natural gas fuel usage not to exceed 1.995 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	Fuel Usage This Month	Fuel Usage Previous 11 Months	Fuel Usage 12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and the ANDERSON OFFICE OF AIR MANAGEMENT**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: iPower Technologies, LLC  
Source Address: 4640 Pendelton Avenue, Anderson, IN 46013  
Mailing Address: 4640 Pendelton Avenue, Anderson, IN 46013  
FESOP No.: 095-16578-00118

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**



<b>Probable Cause of Deviation:</b>
<b>Response Steps Taken:</b>

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management  
Office of Air Quality**

Addendum to the  
Technical Support Document (TSD) for a Federally Enforceable  
Operating Permit (FESOP) and New Source Review

**Source Name:** iPower Technologies, LLC  
**Source Location:** 4640 Pendleton Avenue, Anderson, IN 46013  
**County:** Madison  
**SIC Code:** 3621  
**Operation Permit No.:** F095-16578-00118  
**Permit Reviewer:** Adeel Yousuf / EVP

On March 26, 2003, the Office of Air Quality (OAQ) had a notice published in the Herald Bulletin, Anderson, Indiana, stating that iPower Technologies, LLC had applied for a Federally Enforceable State Operating Permit (FESOP) relating to the construction and operation of portable electric generators manufacturing facility. The notice also stated that OAQ proposed to issue a FESOP Permit for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On March 26, 2003, Valerian Simianu of Secor International, Inc submitted comments on the proposed FESOP. The summary of the comments and corresponding responses is as follows (bolded language has been added and the language with a line through it has been deleted):

**Comment 1**

Section D.2. under Insignificant Activities (b) (2) the permit state:

(2) Twenty (20) natural gas fired engine endurance test stands identified as E4 though E23, each with an output rating of 235 HP, and each exhausting through stacks E4 through E23, respectively.

This is inconsistent with Section A Description and description in the TSD. The text should read:

(2) Thirteen (13) natural gas fired engine endurance test stands identified as E4 though E16, each with an output rating of 235 HP, and each exhausting through stacks E4 through E16, respectively.

## Response 1

Facility description in Section D.2 (b)(2) has been revised to reflect the correct number of units.

### SECTION D.2

### FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

#### Insignificant Activities

- (b) Other categories with emissions below insignificant thresholds (i.e. less than 5 pounds per hour NO<sub>x</sub>, less than 25 pounds per day CO and less than 3 pound per hour VOC).
  - (1) Three (3) natural gas fired engine test stands identified as E1, E2 and E3, each with an output rating of 235 HP, and each exhausting through stacks E1, E2 and E3, respectively.
  - (2) **Twenty Thirteen (20-13)** natural gas fired engine endurance test stands identified as E4 through E23 **16**, each with an output rating of 235 HP, and each exhausting through stacks E4 through E23 **16**, respectively.
  - (3) One (1) epoxy dip tank, identified as PDG-U500, which is capable of coating stator coils at a maximum rate of 300 units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Upon further review, the OAQ has decided to make the following changes to the FESOP renewal. Bolded language has been added and the language with a line through it has been deleted.

IDEM, OAQ has determined that since there are sixteen (16) 235 HP engines, it would require testing 20% of them to obtain a representative amount of data based on IDEM's stack test guidance. This would mean testing of atleast three (3) engines in this case. Condition D.2.2(a) has been revised as follows.

#### D.2.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) Within 180 days after issuance of this permit, the Permittee shall perform CO and NO<sub>x</sub> testing on **any one three (43)** 235 hp engine built test stands (from E1 through E16) utilizing methods as approved by the commissioner. This test shall be repeated whenever there is a change in the operating conditions of any engine causing potential emissions to increase. Testing shall be conducted in accordance with Section C- Performance Testing.

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Federally Enforceable Operating Permit (FESOP) and New Source Review

#### Source Background and Description

**Source Name:** iPower Technologies, LLC  
**Source Location:** 4640 Pendleton Avenue, Anderson, IN 46013  
**County:** Madison  
**SIC Code:** 3621  
**Operation Permit No.:** F095-16578-00118  
**Permit Reviewer:** Adeel Yousuf / EVP

The Office of Air Quality (OAQ) has reviewed a FESOP application from iPower Technologies, LLC relating to the construction and operation of portable electric generators manufacturing facility.

#### Source Definition

iPower Technologies, LLC submitted an application on December 12, 2002 for the construction and operation of a new source to be located at 4640 Pendleton Avenue, Anderson, Indiana. This application is reviewed as a new source review at new Pendleton Avenue location. iPower Technologies, LLC, currently operates a similar source at 1819 W. 38<sup>th</sup> Street, Anderson, Indiana. This source is operating under existing MSOP No. 095-14781-00106 issued on November 5, 2001. The source plans to move all existing equipment (including three (3) natural gas fired engine test stands) at 1819 W. 35<sup>th</sup> street to the Pendleton Avenue location. In addition to the existing units, the source also requests to increase the actual input horsepower rating of the currently installed engines and add an additional 16 natural gas fired test stands. Due to the addition of 16 new engine stands, the source's permit status has been determined to have changed from MSOP to FESOP level.

#### Permitted Emission Units and Pollution Control Equipment

This is a first time approval and no previous permits, registrations, modifications or exemptions have been issued to the source. The source is moving all existing equipment permitted under MSOP 095-14781-00106 to the new location. Existing MSOP 095-14781-00106 will be revoked once the FESOP (095-16578-00118) is issued.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Two (2) natural gas fired engine built test stands identified as E17 and E18, each with an output rating of 670 HP, and each exhausting through stacks E17 and E18, respectively.
- (b) One (1) natural gas fired engine built test stand identified as E19, with an output rating of 1600 HP, and exhausting through stack E19.

#### Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

### **Insignificant Activities**

The application also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:  
Ten (10) natural gas-fired space heaters, identified as 1 through 10 with a total heat input capacity of 1.75 million British Thermal Units per hour (MMBtu/hr).
- (b) Other categories with emissions below insignificant thresholds (i.e. less than 5 pounds per hour NO<sub>x</sub>, less than 25 pounds per day CO or less than 3 pound per hour VOC).
  - (1) Three (3) natural gas fired engine test stands identified as E1, E2 and E3, each with an output rating of 235 HP, and each exhausting through stacks E1, E2 and E3, respectively.
  - (2) Thirteen (13) natural gas fired engine endurance test stands identified as E4 through E16, each with an output rating of 235 HP, and each exhausting through stacks E4 through E16, respectively.
  - (3) One (1) epoxy dip tank, identified as PDG-U500, which is capable of coating stator coils at a maximum rate of 300 units per hour.
- (c) One electric drying oven, at a rated capacity of 108 kW.
- (d) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (f) Closed loop heating and cooling systems.
- (g) Infrared cure equipment.
- (h) Paved and unpaved roads and parking lots with public access.
- (i) Stationary fire pumps.

### **Existing Approvals**

This new source has no existing approvals.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Recommendation**

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and

additional information submitted by the applicant.

An administratively incomplete FESOP application for the purposes of this review was received on December 12, 2002. Additional information received on February 3, 2002 makes the FESOP application administratively complete.

There was no notice of completeness letter mailed to the source.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 8).

### Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.74
PM-10	0.11
SO <sub>2</sub>	0.04
VOC	15.40
CO	118.44
NO <sub>x</sub>	104.38

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year) *
Formaldehyde	3.94
Acetaldehyde	0.62
Acrolein	0.38
n-Hexane	0.082
Benzene	0.032
TOTAL	5.32

\* Only worst five (5) HAPs are listed

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of NO<sub>x</sub> and CO is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward

determination of PSD and Emission Offset applicability.

### Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
E1 through E16 * (235 bhp each)	0.42	0.003	0.025	7.262	75.157	60.997	2.20 (single) 2.98 (total)
E17 and E18 (670 bhp each)	0.15	0.001	0.009	2.58	19.40	19.40	0.78 (single) 1.06 (total)
E19 (1600 bhp)	0.01	0.00	0.001	0.17	1.32	1.32	0.05 (single) 0.07 (total)
Space Heaters (1-10) *	0.00	0.10	0.00	0.00	0.70	0.80	negl.
Dip Tank (PD6-U500) *	0.00	0.00	0.00	2.46	0.00	0.00	0.00
Total Emissions	0.58	0.104	0.035	12.49	96.58	82.52	3.04 (single) 4.12 (total)

\* Insignificant activities

### County Attainment Status

The source is located in Madison County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Madison County has been designated as attainment or unclassifiable for ozone.

### Federal Rule Applicability



- (a) This source is not subject to the requirements of the New Source Performance Standards (NSPS), 326 IAC 12, (40 CFR Part 60.460, Subpart TT-Standards of Performance for Metal Coil Surface Coating), because the stator coil metal that is being coated is already in the finished product state. The metal is not in a flat metal strip or sheet that comes in rolls or coils.
- (b) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

**State Rule Applicability - Entire Source**

**326 IAC 2-8-4 (FESOP)**

Pursuant to this rule, the amount of NO<sub>x</sub> and CO emitted from the source shall be limited to less than one hundred (100) tons per year, each.

The input of natural gas fuel to the one (1) Engine built test stand (E19) shall be limited to less than 1.995 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month. This fuel usage limitation is equivalent to limiting emissions to 1.323 tons per year for each CO and NO<sub>x</sub> (based on the same emission factor of 1.5 gr/bhp-hr) using engine manufacturer's emissions data.

Compliance with above conditions will limit the source-wide NO<sub>x</sub> and CO emissions including insignificant activities to less than 100 tons per twelve (12) consecutive month period, respectively. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

**326 IAC 2-4.1-1 (New Source Toxics Control)**

326 IAC 2-4.1-1 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per twelve (12) month period and potential emissions of a combination of HAPs greater than or equal to twenty-five (25) tons per twelve (12) month period. This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because it has potential single HAP and total HAPs emission of less than 10 and 25 tons per year, respectively.

**326 IAC 2-6 (Emission Reporting)**

This source, which is located in Madison County, has accepted federally enforceable operation conditions which limit emissions of NO<sub>x</sub> and CO to below 100 tons per year. The potential to emit of all other regulated pollutants is less than 100 tons per year. Therefore, this source is not subject to 326 IAC 2-6 (Emission Reporting).

**326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**State Rule Applicability - Individual Facilities**

**326 IAC 8-1-6 (General Reduction Requirements)**

Pursuant to 326 IAC 8-1-6, new facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a potential to emit (PTE) VOC at 25 tons or more per year, and which are not otherwise regulated by another provision of Article 8, are subject to the rule requirements. Potential VOC emissions from this source are less than 25 tons per year. Therefore the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 (General Reduction Requirements) are not applicable to the source.

**326 IAC 9-1-2 (Carbon Monoxide Emission Rules)**

The twenty six (26) natural gas fired engine built test stands (E1 through E26) are not subject to the requirement of 326 IAC 9-1-2 because these facilities are not used for petroleum refining, ferrous metal smelter or refuse incineration.

**326 8-2-4 (Coil Coating Facilities)**

This rule establishes emission limitation for coating of any flat metal sheets or strips that comes in rolls or coils. This rule does not apply to the stator metal coil coating at this source, since they are already at the finished product stage when coated, and not when in flat metal strip or sheet stage.

**326 IAC 8-2-9 (Miscellaneous Metal Coating)**

The one (1) Epoxy Dip Tank, identified as PDG-U500 is not subject to this rule, because its actual VOC emissions are less than 15 pounds per day.

**326 IAC 6-3-2 (Process Operations)**

The stator coil coating is not subject to this rule, because dip tank coating has a 100% transfer efficiency which means that there are no Particulate emissions.

**326 IAC 6-2 (Indirect Heating Facilities)**

The ten (10) natural gas-fired space heaters are not subject to 326 IAC 6-2, because they are not sources of indirect heating.

**326 IAC 7-1 (Sulfur Dioxide Emission Limitations)**

The nineteen (26) natural gas fired engine built test stands (E1 through E19) are not subject to 326 IAC 7-1, because they do not emit SO<sub>2</sub> at a rate of 25 tons per year or 10 pounds per hour.

**Testing Requirements**

Source wide potential CO and NOx emissions are calculated to be 118.44 and 104.38 tons per year, respectively, but each is limited to less than 100 tons per year by limiting the natural gas usage for one (1) engine built test stand E19. Stack test for one (1) 235 hp engine built test stand (from E1 through E16), one (1) 670 hp engine built test stand (from E17 and E18), and one (1) 1600 hp engine built test stand (E19) is required to verify the CO and NOx emission factors provided by the source. Emission factors used in the permit are based on data provided by the engine manufacturer. The results of testing required shall be used to confirm the CO and NOx emission factor provided by the source. If testing indicates an emission factor greater than the one used in emission calculations then the natural gas fuel usage shall be adjusted to keep potential CO and NOx emissions to less than 100 tons per year.

**Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance

with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements for the source.

## **Conclusion**

The construction and operation of this portable electric generators manufacturing facility will be subject to the conditions of the attached proposed FESOP No. F095-16578-00118.

## Appendix A: Emission Calculations

**Company Name:** iPower Technologies, LLC  
**Address City IN Zip:** 4640 Pendelton Avenue, Anderson, IN 46013  
**Permit No.:** 095-16578-00118  
**Reviewer:** Adeel Yousuf / EVP  
**Date:** January 10, 2003

Uncontrolled Potential Emissions (tons/year)				
Emissions Generating Activity				
Pollutant	Natural Gas Engines	Surface Coating *	Natural Gas Space Heaters *	TOTAL
PM	0.74	0.00	0.00	0.74
PM10	0.01	0.00	0.10	0.11
SO2	0.04	0.00	0.00	0.04
NOx	103.58	0.00	0.80	104.38
VOC	12.94	2.46	0.00	15.40
CO	117.74	0.00	0.70	118.44
total HAPs	5.32	0.00	negl.	5.32
worst case single HAP	(Formaldehyde) 3.94	0.00	negl.	(Formaldehyde) 3.94
Total emissions based on rated capacity at 8,760 hours/year.				
* Insignificant Activities				
Controlled Potential Emissions (tons/year)				
Emissions Generating Activity				
Pollutant	Natural Gas Engines	Surface Coating *	Natural Gas Space Heaters *	TOTAL
PM	0.58	0.00	0.00	0.58
PM10	0.00	0.00	0.10	0.10
SO2	0.03	0.00	0.00	0.03
NOx	81.73	0.00	0.80	82.53
VOC	10.03	2.46	0.00	12.49
CO	95.89	0.00	0.70	96.59
total HAPs	4.12	0.00	negl.	4.12
worst case single HAP	(Formaldehyde) 3.04	0.00	negl.	(Formaldehyde) 3.04

Total emissions based on rated capacity at 8,760 hours/year, after control.

\* Insignificant Activities

**Appendix A: Emission Calculations**  
**Internal Combustion Engines - Diesel Fuel**  
**Turbine (>250 and <600 HP)**  
**Reciprocating**

**Company Name: iPower Technologies, LLC**  
**Address City IN Zip: 4640 Pendelton Avenue, Anderson, IN 46013**  
**Permit No.: 095-16578-00118**  
**Reviewer: Adeel Yousuf / EVP**  
**Date: January 10, 2003**

**A. Engine 01 through Engine 16**

**Max Engine Capacity:** 235 break horsepower (bhp) **Total Number of Engines:** 16  
0.597 MMBtu/hr

**Hours of Operation:** 8760 hour/year

Emission Factors			Total per Engine		Total for 16 Engines	
Pollutant	AP-42 Factor	Mfg's Spec. *	lb/hr	ton/yr	lb/hr	ton/yr
	lb/10 <sup>6</sup> Btu	gr/bhp-hr				
PM	9.99E-03	n/a	0.0060	0.0261	0.0954	0.418
PM10	7.71E-05	n/a	0.000046	0.0002	0.0007	0.003
SO2	5.88E-04	n/a	0.0004	0.0015	0.0056	0.025
NOx	4.08	1.68	0.8704	3.8123	13.9262	60.997
VOC	1.2E-01	0.2	0.1036	0.4538	1.6579	7.262
CO	3.17E-01	2.07	1.0724	4.6973	17.1591	75.157
HAPs	AP-42 Factor		lb/hr	ton/yr	lb/hr	ton/yr
	lb/10 <sup>6</sup> Btu					
2,2,4-Trimethylpentane	2.5E-04		0.00015	0.00065	0.00239	0.01046
Acetaldehyde	8.36E-03		0.00499	0.02186	0.07985	0.34976
Acrolin	5.14E-03		0.00307	0.01344	0.04910	0.21505
Benzene	4.40E-04		0.00026	0.00115	0.00420	0.01841
Ethylbenzene	3.97E-05		0.00002	0.00010	0.00038	0.00166
Formaldehyde	5.28E-02		0.03152	0.13806	0.50435	2.20903
Methanol	2.50E-03		0.00149	0.00654	0.02388	0.10459
Methylene Chloride	2.0E-05		0.00001	0.00005	0.00019	0.00084
n-Hexane	1.11E-03		0.00066	0.00290	0.01060	0.04644
Naphthalene	7.44E-05		0.00004	0.00019	0.00071	0.00311
Toluene	4.08E-04		0.00024	0.00107	0.00390	0.01707
Vinyl Chloride	1.49E-05		0.00001	0.00004	0.00014	0.00062
Xylenes	1.84E-04		0.00011	0.00048	0.00176	0.00770
Total			4.3E-02	0.19	0.68	2.98

**Methodology**

\* Manufacturer's specification on engine emissions were used in lieu for the indicated pollutants. Manufacturers data are based on the set-up of these engines, which have been designed to meet California NOx standards.

Potential Throughput (hp-hr/yr) = hp \* 8760 hr/yr

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] \* 8760 hr/yr / (2,000 lb/ton )

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton )

**Appendix A: Emission Calculations**  
**Internal Combustion Engines - Diesel Fuel**  
**Turbine (>250 and <600 HP)**  
**Reciprocating**

**Company Name: iPower Technologies, LLC**  
**Address City IN Zip: 4640 Pendelton Avenue, Anderson, IN 46013**  
**Permit No.: 095-16578-00118**  
**Reviewer: Adeel Yousuf / EVP**  
**Date: January 10, 2003**

**B. Engine 17 and Engine 18**

**Max Engine Capacity:** 670 break horsepower (bhp) **Total Number of Engines:** 2  
1.7 MMBtu/hr

**Hours of Operation:** 8760 hour/year

Emission Factors			Total per Engine		Total for 2 Engines	
Pollutant	AP-42 Factor	Mfg's Spec. *	lb/hr	ton/yr	lb/hr	ton/yr
	lb/10 <sup>6</sup> Btu	gr/bhp-hr				
PM	9.99E-03	n/a	0.0170	0.0744	0.0340	0.149
PM10	7.71E-05	n/a	0.0001	0.0006	0.0003	0.001
SO2	5.88E-04	n/a	0.0010	0.0044	0.0020	0.009
NOx	4.08	1.5	2.2157	9.7046	4.4313	19.409
VOC	1.2E-01	0.2	0.2954	1.2939	0.5908	2.588
CO	3.17E-01	1.5	2.2157	9.7046	4.4313	19.409
HAPs	AP-42 Factor		lb/hr	ton/yr	lb/hr	ton/yr
	lb/10 <sup>6</sup>					
2,2,4-Trimethylpentane	2.5E-04		0.00043	0.00186	0.00085	0.00372
Acetaldehyde	8.36E-03		0.01421	0.06225	0.02842	0.12450
Acrolin	5.14E-03		0.00874	0.03827	0.01748	0.07654
Benzene	4.40E-04		0.00075	0.00328	0.00150	0.00655
Ethylbenzene	3.97E-05		0.00007	0.00030	0.00013	0.00059
Formaldehyde	5.28E-02		0.08976	0.39315	0.17952	0.78630
Methanol	2.50E-03		0.00425	0.01862	0.00850	0.03723
Methylene Chloride	2.0E-05		0.00003	0.00015	0.00007	0.00030
n-Hexane	1.11E-03		0.00189	0.00827	0.00377	0.01653
Naphthalene	7.44E-05		0.00013	0.00055	0.00025	0.00111
Toluene	4.08E-04		0.00069	0.00304	0.00139	0.00608
Vinyl Chloride	1.49E-05		0.00003	0.00011	0.00005	0.00022
Xylenes	1.84E-04		0.00031	0.00137	0.00063	0.00274
Total			1.2E-01	0.53	0.24	1.06

**Methodology**

\* Manufacturer's specification on engine emissions were used in lieu for the indicated pollutants. Manufacturers data are based on the set-up of these engines, which have been designed to meet California NOx standards.

Potential Throughput (hp-hr/yr) = hp \* 8760 hr/yr

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] \* 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

**Appendix A: Emission Calculations**  
**Internal Combustion Engines - Diesel Fuel**  
**Turbine (>250 and <600 HP)**  
**Reciprocating**

**Company Name: iPower Technologies, LLC**  
**Address City IN Zip: 4640 Pendelton Avenue, Anderson, IN 46013**  
**Permit No.: 095-16578-00118**  
**Reviewer: Adeel Yousuf / EVP**  
**Date: January 10, 2003**

**C. Engine 19**

**Max Engine Capacity:** 1600 break horsepower (bhp) **Total Number of Engines:** 1  
4.07 MMBtu/hr

**Natural Gas Heating Value:** 1020 Btu/ft<sup>3</sup>

**Limited Hours of Operation:** 500 hours per year

**Engine Fuel Use:** 3,990.20 ft<sup>3</sup>/hr = 4.07E+06 Btu/hr  
1,995,098.04 ft<sup>3</sup>/yr = 2.04E+09 Btu/yr

Source wide NO<sub>x</sub> and CO emission must be limited to less than 100 tons per year.

NO<sub>x</sub> and CO emissions from Engine 26 will be limited by limiting the fuel usage for 500 hours of annual operation.

Emission Factors			Uncontrolled		Controlled	
Pollutant	AP-42 Factor	Mfg's Spec. *	lb/hr	ton/yr	lb/hr	ton/yr
	lb/10 <sup>6</sup> Btu	gr/bhp-hr				
PM	9.99E-03	n/a	0.0407	0.1781	0.0407	0.010
PM10	7.71E-05	n/a	0.0003	0.0014	0.0003	0.000
SO <sub>2</sub>	5.88E-04	n/a	0.0024	0.0105	0.0024	0.001
NO <sub>x</sub>	4.08	1.5	5.2911	23.1751	5.2911	1.323
VOC	1.2E-01	0.2	0.7055	3.0900	0.7055	0.176
CO	3.17E-01	1.5	5.2911	23.1751	5.2911	1.323
HAPs	AP-42 Factor		lb/hr	ton/yr	lb/hr	ton/yr
	lb/10 <sup>6</sup>					
2,2,4-Trimethylpentane	2.5E-04		0.00102	0.00446	0.00102	0.00025
Acetaldehyde	8.36E-03		0.03403	0.14903	0.03403	0.00851
Acrolien	5.14E-03		0.02092	0.09163	0.02092	0.00523
Benzene	4.40E-04		0.00179	0.00784	0.00179	0.00045
Ethylbenzene	3.97E-05		0.00016	0.00071	0.00016	0.00004
Formaldehyde	5.28E-02		0.21490	0.94124	0.21490	0.05372
Methanol	2.50E-03		0.01018	0.04457	0.01018	0.00254
Methylene Chloride	2.0E-05		0.00008	0.00036	0.00008	0.00002
n-Hexane	1.11E-03		0.00452	0.01979	0.00452	0.00113
Naphthalene	7.44E-05		0.00030	0.00133	0.00030	0.00008
Toluene	4.08E-04		0.00166	0.00727	0.00166	0.00042
Vinyl Chloride	1.49E-05		0.00006	0.00027	0.00006	0.00002
Xylenes	1.84E-04		0.00075	0.00328	0.00075	0.00019
		Total	0.29	1.27	0.29	0.07

**Methodology**

\* Manufacturer's specification on engine emissions were used in lieu for the indicated pollutants. Manufacturers data are based on the set-up of these engines, which have been designed to meet California NO<sub>x</sub> standards.

Potential Throughput (hp-hr/yr) = hp \* 8760 hr/yr

Emission Factors are from AP42 (7/00), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] \* 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp) x Emission Factor (g/hp-hr)] x (1 lb/453.54 g) \* 8760 hr/yr / (2,000 lb/ton)

Appendix A: Emission Calculations  
Internal Combustion Engines - Diesel Fuel  
Turbine (>250 and <600 HP)  
Reciprocating

Company Name: **iPower Technologies, LLC**  
Address City IN Zip: **4640 Pendelton Avenue, Anderson, IN 46013**  
Permit No.: **095-16578-00118**  
Reviewer: **Adeel Yousuf / EVP**  
Date: **January 10, 2003**

**D. Total Emissions for 26 Engines**

Total for 26 Engines

Pollutant	Uncontrolled	Controlled
PM	0.74	0.58
PM10	0.01	0.004
SO2	0.04	0.03
NOx	103.58	81.73
VOC	12.94	10.03
CO	117.74	95.89
HAPs	ton/yr	ton/yr
2,2,4-Trimethylpentane	0.0186	0.0144
Acetaldehyde	0.6233	0.4828
Acrolin	0.3832	0.2968
Benzene	0.0328	0.0254
Ethylbenzene	0.0030	0.0023
Formaldehyde	3.9366	3.0491
Methanol	0.1864	0.1444
Methylene Chloride	0.0015	0.0012
n-Hexane	0.0828	0.0641
Naphthalene	0.0055	0.0043
Toluene	0.0304	0.0236
Vinyl Chloride	0.0011	0.0009
Xylenes	0.0137	0.0106
Total:	5.32	4.12



**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**Small Industrial Boiler**

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**Company Name: iPower Technologies, LLC**  
**Address City IN Zip: 4640 Pendelton Avenue, Anderson, IN 46013**  
**Permit No.: 095-16578-00118**  
**Reviewer: Adeel Yousuf / EVP**  
**Date: January 10, 2003**

Ten (10) natural gas fired space heaters

Heat Input Capacity

MMBtu/hr

Potential Throughput

MMCF/yr

1.8
-----

15.8

Pollutant						
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.0	0.1	0.0	0.8	0.0	0.7

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only**

Page 7 of 8 TSD App A

**MM BTU/HR <100  
Small Industrial Boiler  
HAPs Emissions**

**Company Name: iPower Technologies, LLC  
Address City IN Zip: 4640 Pendelton Avenue, Anderson, IN 46013  
Permit No.: 095-16578-00118  
Reviewer: Adeel Yousuf / EVP  
Date: January 10, 2003**

**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.656E-05	9.461E-06	5.913E-04	1.419E-02	2.681E-05

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.942E-06	8.672E-06	1.104E-05	2.996E-06	1.656E-05

Methodology is the same as page 1.

Total: 1.488E-02

The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

Page 8 of 8 TSD App A

**Company Name:** iPower Technologies, LLC  
**Address City IN Zip:** 4640 Pendelton Avenue, Anderson, IN 46013  
**Permit No.:** 095-16578-00118  
**Reviewer:** Adeel Yousuf / EVP  
**Date:** January 31, 2003

**Dip Tank PD6-U500**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Epoxy Mixture	9.9	15.40%	0.0%	15.4%	0.0%	84.60%	0.00123	300.000	1.52	1.52	0.56	13.50	2.46	0.00	1.80	100%

<b>State Potential Emissions</b>	<b>Add worst case coating to all solvents</b>	<b>0.56</b>	<b>13.50</b>	<b>2.46</b>	<b>0.00</b>
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**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Sum of worst case coatings in each booth